

In the Claims:

1. (Original) A voltage regulator circuit comprising:
an alternator driven at a variable speed;
a source of AC power operable with the alternator;
a DC load connected for receiving the power; and
at least two switchable rectifying means to rectify and control the flow of power from the alternator to the load, wherein the at least two switchable rectifying means each include input control means, and wherein the input control means is responsive to the voltage of the DC load, and also responsive to a timing pulse of selected duration, the duration chosen to insure that following a signal to an input control means responsive to a voltage of the DC load, that all other switchable rectifying means are switched on for a next conduction cycle if the variable speed is above a selected level.
2. (New) The circuit of claim 1, wherein the selected duration is a function of the variable speed.
3. (New) The circuit of claim 1, wherein the selected duration decreases with the variable speed when the variable speed is above the selected level.
4. (New) The circuit of claim 1, wherein the input control means is responsive to an instantaneous voltage value of the DC load.
5. (New) The circuit of claim 1, wherein the input control means is further responsive to temperature.

6. (New) The circuit of claim 5, wherein the temperature is a temperature within the voltage regulator circuit.

7. (New) The circuit of claim 5, wherein the temperature is related to a temperature of a battery operable with the voltage regulator circuit.

8. (New) The circuit of claim 5, wherein the voltage regulator circuit is sensitive to both a temperature thereof and a temperature of a battery operable therewith.